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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,960	06/06/2000	Kar W. Yung	PD-200066	9611
020991	7590 05/22/2003		EXAMINI	ER
HUGHES ELECTRONICS CORPORATION PATENT DOCKET ADMINISTRATION		LE, DANH C		
BLDG 001 M/S A			ART UNIT	PAPER NUMBER
P O BOX 956	74 002450056		2683	
EL SEGUNDO, O	JA 902450956		DATE MAII ED: 05/22/2003	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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	Application No.	Applicant(s)	
	09/587,960	YUNG ET AL.	
Notice of Allowability	Examiner	Art Unit	
	DANH C LE	2683	
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	IS (OR REMAINS) CLOSE 35) or other appropriate cor RIGHTS. This application	D in this application. If not includ mmunication will be mailed in due	led · course. THIS
1. This communication is responsive to <u>4/7/03</u> .			
2. The allowed claim(s) is/are <u>1-23</u> .			
3. The drawings filed on are accepted by the Exami		A) (0)	
4. ☐ Acknowledgment is made of a claim for foreign priority (a) ☐ All b) ☐ Some* c) ☐ None of the:	Inder 35 U.S.C. § 119(a)-(0	3) or (τ).	
1. Certified copies of the priority documents ha	ave been received.		
2. Certified copies of the priority documents ha		cation No	
3. Copies of the certified copies of the priority International Bureau (PCT Rule 17.2(a)).		ived in this national stage applica	ation from the
* Certified copies not received: 5. Acknowledgment is made of a claim for domestic priority	under 35 II S.C. & 119(e)	(to a provisional application)	
(a) The translation of the foreign language provisiona			
6. Acknowledgment is made of a claim for domestic priority			
Applicant has THREE MONTHS FROM THE "MAILING DATE" below. Failure to timely comply will result in ABANDONMENT	of this communication to for this application. THIS 1	ile a reply complying with the requ THREE-MONTH PERIOD IS NOT	uirements noted EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be su INFORMAL PATENT APPLICATION (PTO-152) which gives re			NOTICE OF
8. X CORRECTED DRAWINGS must be submitted.			•
(a) ☑ including changes required by the Notice of Draftsp	person's Patent Drawing Re	eview (PTO-948) attached	
 1) ☑ hereto or 2) ☐ to Paper No (b) ☐ including changes required by the proposed drawing 	a correction filed	which has been approved by the	Evaminer
(c) ☐ including changes required by the proposed drawin			
(c) Including changes required by the attached Exami	iei 3 Amendment / Comme	nt of in the office action of Faper	
Identifying indicia such as the application number (see 37 CFI each sheet.	R 1.84(c)) should be written o	on the drawings in the front (not the	e back) of
9. DEPOSIT OF and/or INFORMATION about the de attached Examiner's comment regarding REQUIREMENT FOR			Note the
Attachment(s)			
1⊠ Notice of References Cited (PTO-892)	2∏ Notic	ce of Informal Patent Application ((PTO-152)
3 Notice of Draftperson's Patent Drawing Review (PTO-948)		view Summary (PTO-413), Paper	•
5☐ Information Disclosure Statements (PTO-1449), Paper No.		miner's Amendment/Comment	
7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	8⊠ Exan 9⊡ Othe	niner's Statement of Reasons for er	Allowance

Application/Control Number: 09/587,960

Art Unit: 2683

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Vijayalakshmi D.Duraiswamy on 5/20/03.

On page 21, line 18, "_____" should fill with "09/550505".

On page 21, line 19, "_____" should fill with "07/14/2000".

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Claims 1-23 are allowed.

In the Specifications:

As to claim 1, Dennis (US 5,467,282) teaches the GPS and Satellite navigation system. Hart et al (US 6,314,269) teaches the multi-beam TDMA satellite mobile communication system. Fleeter et al (US 6,396,819) teaches the low cost satellite communication system. The teaching of Dennis, Hart, Fleet and previous prior arts fails to teach assigning each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria; assigning each of said plurality of remote users one or more resource cells in platform-code space depending upon service requirements of each of said plurality of remote users, at least one of said users assigned a same platform code in more than one node wherein each resource cell

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assigned to a particular user enables the particular user to transmit signals to or from the hub through a particular one of said transponding, nodes and using a particular code.

As to claim 9, Dennis (US 5,467,282) teaches the GPS and Satellite navigation system. Hart et al (US 6,314,269) teaches the multi-beam TDMA satellite mobile communication system. Fleeter et al (US 6,396,819) teaches the low cost satellite communication system. The teaching of Dennis, Hart, Fleet and previous prior arts fails to teach a plurality of individual resource cells each associated with a particular one of said plurality of individual transponding nodes and a particular one of a plurality of available codes wherein more than one of the plurality of available codes are shared over more than one node.

As to claim 18, Dennis (US 5,467,282) teaches the GPS and Satellite navigation system. Hart et al (US 6,314,269) teaches the multi-beam TDMA satellite mobile communication system. Fleeter et al (US 6,396,819) teaches the low cost satellite communication system. The teaching of Dennis, Hart, Fleet and previous prior arts fails to teach transmitting signals to or from said ground hub through one or more of said transponding nodes and one or more resource cells that have the same code in more than one of said transponder nodes destined for the same user.

As to claims 22 and 23, Dennis (US 5,467,282) teaches the GPS and Satellite navigation system. Hart et al (US 6,314,269) teaches the multi-beam TDMA satellite mobile communication system. Fleeter et al (US 6,396,819) teaches the low cost satellite communication system. The teaching of Dennis, Hart, Fleet and previous prior

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arts fails to teach wherein said system utilizes a TDMA technique and said total profit/utility value is maximized according to the following constraints as recited claims.

Dependent claims 2-8,10-17,19-21 are allowable for the same reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Danh C.Le

May 20, 2003

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600





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P O BOX 956		RECEIVED	2683	/7:	
EL SEGUNDO, CA 902450956	JA 902430930	MAY 2 7 2003	DATE MAILED: 05/22/2003	10	
		PAT ENTS & LICENSING CORPORATE OFFICE			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 401 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 401 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS PO. Box 1450 Alexandra, Vignia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

020991

7590

05/22/2003

HUGHES ELECTRONICS CORPORATION PATENT DOCKET ADMINISTRATION BLDG 001 M/S A109 P O BOX 956 EL SEGUNDO, CA 902450956 RECEIVED

PAT ENTS & LICENSING CORPORATE OFFICE

MAY 27 2003

EXAMINER

LE, DANH C

ART UNIT CLASS-SUBCLASS

2683 455-013100

DATE MAIL ÉD: 05/22/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,960	06/06/2000	Kar W. Yung	PD-200066	9611

TITLE OF INVENTION: RESOURCE ALLOCATION METHOD FOR MULTI-PLATFORM COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	هر,	\$1300	08/22/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT/REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

(703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CURRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 05/22/2003 020991 7590 **HUGHES ELECTRONICS CORPORATION** PATENT DOCKET ADMINISTRATION Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. BLDG 001 M/S A109 P O BOX 956 EL SEGUNDO, CA 902450956 (Depositor's name) (Signature) (Date) CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. PD-200066 06/06/2000 Kar W. Yung 09/587.960 TITLE OF INVENTION: RESOURCE ALLOCATION METHOD FOR MULTI-PLATFORM COMMUNICATION SYSTEM **PUBLICATION FEE** TOTAL FEE(S) DUE DATE DUE APPLN, TYPE SMALL ENTITY ISSUE FEE 08/22/2003 \$1300 \$0 \$1300 nonprovisional NO **EXAMINER** ART UNIT CLASS-SUBCLASS 455-013100 LE, DANH C 2683 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a $\mbox{\ensuremath{\square}}$ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered patent attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ A check in the amount of the fee(s) is enclosed. ☐ Issue Fee □ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee U The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____(enclose an extra copy of this form). ☐ Advance Order - # of Copies Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or of interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.